

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph on page 1, lines 19-28 with the following amended paragraph:

Such centralized analysis is based upon the collection of a very large volume of data and alarms from the many items of network equipment used to perform the measurement of parameter values in the network, and more precisely in their management information bases (or MIBs), used to store the management data representing the measured values. Once collected, via a Simple Network Management Protocol an (SNMP) collector for example, the data are stored in an archive management base of the Oracle type for example, and are fed into calculation modules which implement predefined formulae or equations.

Please amend the paragraph on page 2, lines 13-18 with the following amended paragraph:

To this purpose, It the invention proposes a local assurance device or arrangement for an equipment element in a communication network presenting a chosen configuration and including means for the measurement of parameter values in the network and a management information base (MIB) storing management data representing the measured values.

Please amend the paragraph on page 5, lines 17-22 with the following amended paragraph:

In particular, the invention can be implemented in all network technologies which have to be managed, and in particular in networks (of the Wavelength-Division Multiplexing (WDM), Synchronous Optical NETwork (SONET), or Synchronous Digital Hierarchy (SDH) type for example) used for the transmission of data (of the Internet-IP or Asynchronous Transfer Mode

(ATM) type for example) or of speech (of the conventional, mobile or Next Generation Network (NGN) type for example).

Please amend the paragraph on page 6, lines 4-11 with the following amended paragraph:

As shown on figure 1, a communication network (N) schematically includes a large variety of network equipment ($wei-NE_i$ – where here $i = 1$ or 2 , but it can take any value), such as, for example, servers equipped with a firewall, switches, edge routers or core routers, capable of exchanging data, in accordance with a network management protocol, with a network management system, and in particular with its network management server (NMS).

Please amend the paragraph on page 6, lines 11-23 with the following amended paragraph:

Each equipment element (wei)(NE_i) conventionally includes a management information base (MIB), also called an object instance base. Each MIB stores management data representing the values of information fields which characterize the associated equipment element (WE_i)(NE_i). Certain of these information fields designate network parameters whose instantaneous values are measured by probes (MM) installed in, or controlled by, the equipment element (WE_i)(NE_i). In addition, each MIB is associated with a management information base specification (not shown), also called an MIB specification, stored in the network management system and accessible to the network management server (NMS).

Please amend the paragraph on page 7, lines 12-29 with the following amended paragraph:

Each network element (NEi) is generally configured specifically so as to transmit to the NMS (or NMS layer) information data representing measurements which it has performed with its probe or probes (MM) and which it has stored in its MIB, as well as alarms signaling problems or breakdowns. The configuration is generally defined by one or more policies. As an example, a first policy relates to the reporting conditions for values measured by the equipment element (NEi) by means of its probes (MM). A second policy can concern the parameter measurements which the equipment element (NEi) must perform with its probe or probes (MM). A third policy can concern the method of operation of the equipment element (NEi). These policies are usually specified for each equipment element (NEi) using a configuration module (MC) of the NMS. They are transmitted to the equipment elements (Nei)(NEi), via the network (N), by means of the management protocol (here the SNMP).

Please amend the paragraph bridging pages 13 and 14 with the following amended paragraph:

The fifth submodule (SM5) can also apply chosen assurance rules to information data coming from other network equipment (Nej)(NEj). Indeed, an equipment element (Nej)(NEj) can be responsible for transmitting values that it has measured and/or aggregated to another equipment element (NEi) equipped with a device or arrangement (D) responsible for processing these values so as to generate new information data which can then be fed back to the NMS or sent to another equipment element (NEj).

Please amend the paragraph on page 16, lines 12-17 with the following amended paragraph:

The invention is not limited to the embodiments of the local assurance management device and of the network element described above by way of example only, but also

encompasses all of the ~~alternatives~~ alternatives which might be envisaged by the professional engineer in the context of the following claims.